### => fil reg

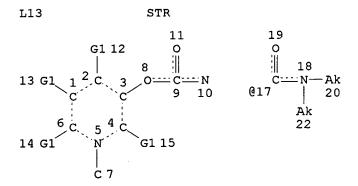
FILE 'REGISTRY' ENTERED AT 14:09:02 ON 06 AUG 1999 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 1999 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 06 AUG 99 HIGHEST RN 230978-72-0 DICTIONARY FILE UPDATES: 06 AUG 99 HIGHEST RN 230978-72-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 13, 1999

Please note that search-term pricing does apply when conducting SmartSELECT searches.

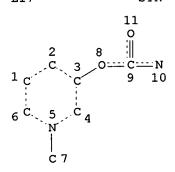
=> d sta que 120



VAR G1=H/AK/17
NODE ATTRIBUTES:
CONNECT IS M1 RC AT 7
CONNECT IS M1 RC AT 10
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 20

STEREO ATTRIBUTES: NONE L17 STR



NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM

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|--|---|--|
| SEARCH REQUEST FORM  |   |  |
| Examiner # (Mandatory):  | Requester's Full Name:  | Howard Che.s   |
| Art Unit 1623 Location (Bldg/Ro  | om#) (fr 8D12) (M) Phone (c   | ircle 305 (306) 308) <u>4535</u>                           |
| Serial Number: <u>09/029, 54</u>   | Results Format Preferred (circ  | ele): PAPER DISK E-MAIL                                    |
| Title of Invention   |   |  |
| Inventors (please provide full names):                                     | ·   |  |
|  |   |  |
| Earliest Priority Date:  | ·   |  |
| Keywords (include any known synonyms re                                    | gistry numbers, explanation of initialisms):  |  |
| Anion $(X) =$  | Br, I   | ·  |
| Plasse see  Olains  Olains   | Prel. Amendment<br>8,10 and 14.   | For 1  |
| subject matter to be searched. Define any term                             | opic, and the concept of the invention. Describe as that may have a special meaning. Give example abstract and the broadcast or most relevant claim | ples of relevant citations, authors,                       |
| + 100se searen   | Cearse 1-11.  |  |
|  |   | `  |
|  |   |  |
| Searcher:a~  | STAFF USE ONLY  Type of Search Vendors (inclu   | ude cost where applicable)                                 |
| Searcher Phone #: 445 \\ Searcher Location: \\ Date Picked Up:  \( \tau \) | Structure (#) Lex   | stel/Orbit<br>is/Nexis                                     |
| Date Completed:  Clerical Prep Time:  Terminal Time:                       | Litigation 1 In-h   |  |
| Number of Databases:   | Other Wes   | Link<br>stlaw<br>er (specify)                              |

# IMPORTANT INFORMATION ABOUT YOUR SEQUENCE SEARCH:

## Compugen Sequence searching hardware and software explained:

This is the new sequence searching system that is currently being phased into as a replacement for the Maspar/Mpsrch platform. This system has been tested by both searchers and examiners, and has shown equivalent results to the Maspar system for the same databases. The results output format for all Compugen printed results are essentially the same except for translations.

# Translation searching on Compugen explained:

The Compugen system utilizes Framesearch software for translations of proteins to nucleotides, and nucleotides to proteins. Some examiners have found these to be superior to the backtranslate software on Maspars.

FrameSearch searches a group of protein sequences for similarity to one or more nucleotide query sequences, or searches a group of nucleotide sequences for similarity to one or more protein query sequences. For each sequence comparison, the program finds an optimal alignment between the protein sequence and the corresponding codons on each the nucleotide sequence. Optimal alignments may include reading frame shifts. Please see any of the professional searching staff if you need assistance with this format.

# File extensions for Compugen results transferred to floppy disks.

Compugen system search results will be delivered in one of two possible formats:

- 1. Standard concatenated files with .flp extension.
- Compressed .zip files which decompressed yield two files as described below:

US08123456.cmr - Contains all commercial databases, may include Issued
US08123456.pen - Contains pending file results only

# VERY IMPORTANT NOTE ABOUT PENDING FILE SEARCHES.

If your search contains file names with the following bolded extensions:

US08123456.rap US08123456.rnp

Do not leave this search in the case, during prosecution, or after the case issues, since it contains pending data which is confidential.

## QUESTIONS? Contact any of the following:

Dilip Pandya, Chief, Information Branch, 308-4268

#### Professional searching staff:

John Dantzman (308-4488); Jan Delaval (308-4498); Mary Hale (308-4258); Barb O'Bryen (308-4291); David Schreiber (308-4292); Paula Sheppard (308-4499); Mark Spencer (308-4266); Beverly Shears (308-4994); Alex Waclawiw (308-4491).

#### DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE

L19 164 SEA FILE=REGISTRY SSS FUL L17

L20 122 SEA FILE=REGISTRY SUB=L19 CSS FUL L13

100.0% PROCESSED 164 ITERATIONS 122 ANSWERS

SEARCH TIME: 00.00.01

=> d his 120-

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L20
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                DEL HOENS?/A
                SAV L20 HOWENS029A/A
            102 S L20 AND (BR OR I OR CL OR F)/ELS AND NC>=2
L21
              7 S L21 AND (OC5 OR OC6)/ES
L22
L23
              8 S L20 AND (OC5 OR OC6)/ES
L24
                STR
              0 S L24 SAM SUB=L20
L25
             20 S L20 NOT L21
L26
             95 S L20 NOT L23, L26
L27
             42 S L19 NOT L20-L23, L26, L27
L28
              1 S L28 AND OC5/ES
L29
L30
              9 S L23, L29
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              0 S L30
L31
     FILE 'HCAPLUS' ENTERED AT 14:08:47 ON 06 AUG 1999
L32
              2 S L30
     FILE 'USPATFULL' ENTERED AT 14:08:50 ON 06 AUG 1999
L33
              0 S L30
     FILE 'REGISTRY' ENTERED AT 14:09:02 ON 06 AUG 1999
=> d ide can tot 130
L30 ANSWER 1 OF 9 REGISTRY COPYRIGHT 1999 ACS
RN
     214146-18-6 REGISTRY
     Pyridinium, 5-[[(dimethylamino)carbonyl]oxy]-2-[(.beta.-D-
CN
     glucopyranosyloxy)methyl]-1-methyl-, chloride (9CI) (CA INDEX NAME)
FS
     STEREOSEARCH
MF
     C16 H25 N2 O8 . Cl
SR
     CA
                  CA, CAPLUS, CASREACT
LC
     STN Files:
```

Absolute stereochemistry.

● cl-

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 129:290039

L30 ANSWER 2 OF 9 REGISTRY COPYRIGHT 1999 ACS

RN 188778-92-9 REGISTRY

CN Pyridinium, 3-[[(dimethylamino)carbonyl]oxy]-1-[12-(.beta.-D-glucopyranosyloxy)dodecyl]-, bromide (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C26 H45 N2 O8 . Br

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

• Br-

1 REFERENCES IN FILE CAPILLS (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 126:264012

L30 ANSWER 3 OF 9 REGISTRY COPYRIGHT 1999 ACS

RN 188778-91-8 REGISTRY

CN Pyridinium, 3-[[(dimethylamino)carbonyl]oxy]-1-[10-(.beta.-D-glucopyranosyloxy)decyl]-, bromide (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C24 H41 N2 O8 . Br

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

• Br-

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 126:264012

L30 ANSWER 4 OF 9 REGISTRY COPYRIGHT 1999 ACS

RN 188778-82-7 REGISTRY

CN Pyridinium, 3-[[(dimethylamino)carbonyl]oxy]-1-[12-[(2,3,4,6-tetra-0-acetyl-.beta.-D-glucopyranosyl)oxy]dodecyl]-, bromide (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C34 H53 N2 O12 . Br

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

● Br-

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 126:264012

L30 ANSWER 5 OF 9 REGISTRY COPYRIGHT 1999 ACS

RN 188778-81-6 REGISTRY

CN Pyridinium, 3-[[(dimethylamino)carbonyl]oxy]-1-[10-[(2,3,4,6-tetra-O-acetyl-.beta.-D-glucopyranosyl)oxy]decyl]-, bromide (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C32 H49 N2 O12 . Br

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

• Br-

1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 126:264012

L30 ANSWER 6 OF 9 REGISTRY COPYRIGHT 1999 ACS

RN 188778-80-5 REGISTRY

CN Pyridinium, 3-[[(dimethylamino)carbonyl]oxy]-1-[8-(.beta.-D-glucopyranosyloxy)octyl]-, chloride (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C22 H37 N2 O8 . C1

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

● cl-

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 126:264012

L30 ANSWER 7 OF 9 REGISTRY COPYRIGHT 1999 ACS

RN 188778-79-2 REGISTRY

CN Pyridinium, 3-[[(dimethylamino)carbonyl]oxy]-1-[8-[(2,3,4,6-tetra-O-acetyl-beta.-D-glucopyranosyl)oxy]octyl]-, chloride (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C30 H45 N2 O12 . Cl

SR CA

LC STN Files: CA, CAPLUS

CRN (188778-77-0)

Absolute stereochemistry.

● c1-

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 126:264012

L30 ANSWER 8 OF 9 REGISTRY COPYRIGHT 1999 ACS

RN 188778-78-1 REGISTRY

CN Pyridinium, 3-[[(dimethylamino)carbonyl]oxy]-1-[8-[(2,3,4,6-tetra-O-acetyl-beta.-D-glucopyranosyl)oxy]octyl]-, salt with trifluoromethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C30 H45 N2 O12 . C F3 O3 S

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 188778-77-0 CMF C30 H45 N2 O12

Absolute stereochemistry.

CM 2

CRN 37181-39-8 CMF C F3 O3 S

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 126:264012

L30 ANSWER 9 OF 9 REGISTRY COPYRIGHT 1999 ACS

RN 188778-77-0 REGISTRY

CN Pyridinium, 3-[[(dimethylamino)carbonyl]oxy]-1-[8-[(2,3,4,6-tetra-0-acetyl-

.beta.-D-glucopyranosyl)oxy]octyl]- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C30 H45 N2 O12

CI COM

SR CA

Absolute stereochemistry.

#### => fil hcaplus

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FILE COVERS 1967 - 6 Aug 1999 VOL 131 ISS 6 FILE LAST UPDATED: 6 Aug 1999 (19990806/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

This file supports REG1stRY for direct browsing and searching of

all substance data from the REGISTRY file. Enter HELP FIRST for more information.

```
=> d 132 all tot
```

```
L32 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 1999 ACS
AN
     1998:565033 HCAPLUS
     129:290039
DN
     Building blocks from sugars. Part 23. Hydrophilic 3-pyridinols from
тT
     fructose and isomaltulose
    Muller, Christoph; Diehl, Volker; Lichtenthaler, Frieder W.
ΑU
     Inst. Organische Chemie, Technische Univ. Darmstadt, Darmstadt, D-64287,
CS
     Germany
     Tetrahedron (1998), 54(36), 10703-10712
SO
     CODEN: TETRAB; ISSN: 0040-4020
PR
     Elsevier Science Ltd.
DT
     Journal
    English
LΑ
     27-16 (Heterocyclic Compounds (One Hetero Atom))
CC
     Section cross-reference(s): 5, 33, 63
os
     CASREACT 129:290039
     Brief exposure to bromine in water-methanol at 0.degree.C smoothly and
AB
     effectively converts furfurylamine derivs. with hydroxymethyl or
     glucosyloxymethyl substituents into the resp. 6-substituted 3-pyridinols,
     whereas the N-methyl-furfurylamine derivs. elaborate the
    N-methyl-pyridinium betaines. Combination of this multistep one-pot
     reaction with the large scale-feasible generation of hydroxymethylfurfural
     from D-fructose and its O-glucosyl analog from isomaltulose, together with
     their ready conversion into furfurylamine derivs. by reductive amination,
     opens up a preparatively satisfactory 3-step "reaction channel" from
     inexpensive sugars to hydrophilic 3-pyridinols, of interest as
     intermediate chems. for drugs of the pyridostigmine type and agrochems.
    hydrophilic pyridinol prepn fructose isomaltulose
ST
TT
    Ring enlargement
        (prepn. of hydrophilic pyridinol derivs. from fructose and isomaltulose
        derived hydroxymethyl- and glucosyloxymethylfurfurylamines)
     214146-13-1P 214146-15-3P
                                   214146-17-5P 214146-18-6P
TΨ
    RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of)
     67-47-0, 5-(Hydroxymethyl) furfural 2016-42-4, n-Tetradecylamine
IT
     88910-22-9
                135100-78-6 135213-82-0
    RL: RCT (Reactant)
        (prepn. of hydrophilic pyridinol derivs. from fructose and isomaltulose
        derived hydroxymethyl- and glucosyloxymethylfurfurylamines)
                  214146-08-4P
                                 214146-10-8P
                                                 214146-11-9P
                                                                214146-12-0P
     66357-60-6P
TT
     214146-16-4P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of hydrophilic pyridinol derivs. from fructose and isomaltulose
        derived hydroxymethyl- and glucosyloxymethylfurfurylamines)
     40222-77-3P, 5-Hydroxy-2-pyridinemethanol
                                                 214146-09-5P
ΙT
     RL: SPN (Synthetic preparation); PREP (Preparation)
```

(prepn. of hydrophilic pyridinol derivs. from fructose and isomaltulose

derived hydroxymethyl- and glucosyloxymethyliurfurylamines)

L32 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 1999 ACS

AN 1997:286379 HCAPLUS

DN 126:264012

```
Pyridinium derivatives and pharmaceutical compositions containing them
ΨT
     Rachaman, Eliezer; Heldman, Eliahu; Adani, Rachel; Amitai, Gabriel
IN
     State of Israel, Israel; Rachaman, Eliezer; Heldman, Eliahu; Adani,
PA
    Rachel; Amitai, Gabriel
     PCT Int. Appl., 37 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LА
     English
     ICM C07D213-66
IC
     ICS C07H015-26; A61K031-44
     27-16 (Heterocyclic Compounds (One Hetero Atom))
CC
     Section cross-reference(s): 1, 63
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO.
                                                            DATE
                                           ______
ΡI
    WO 9708146
                       Α1
                            19970306
                                           WO 1996-IL89
                                                            19960829
         W: AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI,
             GB, GE, HU, IS, JP, KE, KP, KR, LR, LT, LU, LV, MK, MX, NO, NZ,
             PL, PT, RO, RU, SE, SG, SI, SK, TR, UA, US
         RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                                           CA 1996-2230578 19960829
                            19970306
     CA 2230578
                       AA
    AU 9668359
                       Α1
                            19970319
                                           AU 1996-68359
                                                            19960829
                                          EP 1996-928661
                                                            19960829
     EP 851859
                       Α1
                            19980708
         R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE, IE, FI
                      19950831
PRAI IL 1995-115113
    WO 1996-I
        19960829
L89
    MARPAT 126:264012
os
```

$$(z)_{m} \xrightarrow{\stackrel{R^{1}}{\underset{N}{\bigvee}}} \underset{0}{\overset{R^{2}}{\underset{N}{\bigvee}}} \underset{R^{2}}{\overset{Me}{\underset{N}{\bigvee}}} \underset{N}{\overset{Me}{\underset{N}{\bigvee}}} \underset{N}{\overset{Me}{\underset{N}{\bigvee}}}$$

GΙ

A series of carbamates based on the structure of pyridostigimine (PYR) AB were synthesized and evaluated as potential drugs for the treatment of cognitive impairments assocd. with cholinergic perturbances such as in Alzheimer's disease. The compds. are represented by structure I [R1 = H, alkyl, alkenyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl; R2 = alkyl, alkenyl, aryl aralkyl, cycloalkyl, cycloalkylalkyl; A = alk(en/yn)ylene; Z = dialkylcarbamoyl or alkyl; m = 0, 1; Q = transporter recognition moiety for biol. membranes, optionally coupled to a physiol. active acceptable moiety; X- = anion]. Compds. I were examd. for their cholinesterase inhibition, pharmacokinetics, acute toxicity, lipophilicity, reversal of scopolamine-induced memory impairment in rats (passive avoidance), and analgesia in mice. The compds. include N-alkyl-PYR derivs. and various sugar-N-alkyl-PyR conjugates, such as II. Some of the new compds. are less toxic than PYR in rats (LD50 = 5.15 mg/kg s.c.), e.g., II (LD50 = 234.8 mg/kg s.c.). Many I may serve for the treatment of other CNS-related diseases such as stroke, and PNS-related diseases such as

```
myasthenia gravis, glaucoma, neurogenic urinary bladder, and neuralgic
     pain, and as a pretreatment of organophosphorus intoxication.
     pyridinium carbamate prepn cholinergic cognition enhancer; pyridostigmine
ST
     deriv prepn acetylcholinesterase inhibitor
IT
     Nerve diseases
        (neuralgia, treatment; prepn. and pharmacol. of pyridinium derivs. as
        cholinergics)
TΤ
    Analgesics
     Anti-Alzheimer's drugs
     Antiglaucoma agents
     Cholinergic agonists
     Cognition enhancers
     Nervous system agents
     Pharmacokinetics
        (prepn. and pharmacol. of pyridinium derivs. as cholinergics)
TΨ
     Glycosides
     RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or
     effector, except adverse); BPR (Biological process); PRP (Properties); RCT
     (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
        (prepn. and pharmacol. of pyridinium derivs. as cholinergics)
IT
    Bladder diseases
        (treatment of neurogenic; prepn. and pharmacol. of pyridinium derivs.
        as cholinergics)
IT
    Muscarinic antagonists
     Tricyclic antidepressants
        (treatment of tricyclic antidepressant side effects; prepn. and
        pharmacol. of pyridinium derivs. as cholinergics)
IT
    Myasthenia gravis
     Stroke
     Tardive dyskinesia
        (treatment; prepn. and pharmacol. of pyridinium derivs. as
        cholinergics)
TΤ
     9000-81-1, Acetylcholinesterase
    RL: BPR (Biological process); BSU (Biological study, unclassified); MSC
     (Miscellaneous); BIOL (Biological study); PROC (Process)
        (inhibitors; prepn. and pharmacol. of pyridinium derivs. as
        cholinergics)
                                   188778-85-0P
                                                  188778-86-1P
TΨ
                   188778-84-9P
     188778-83-8P
    RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
        (intermediate; prepn. and pharmacol. of pyridinium derivs. as
        cholinergics)
IT
    155-97-5, Pyridostigmine
    RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or
     effector, except adverse); BPR (Biological process); BIOL (Biological
     study); PROC (Process)
        (prepn. and pharmacol. of pyridinium derivs. as cholinergics)
IT
    188778-79-2P
    RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or
     effector, except adverse); BPR (Biological process); PRP (Properties); RCT
     (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
        (prepn. and pharmacol. of pyridinium derivs. as cholinergics)
                   188778-73-6P
                                  188778-74-7P
                                                 188778-75-8P
                                                                188778-76-9P
ΤT
     69440-41-1P
    RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or
     effector, except adverse); BPR (Biological process); PRP (Properties); SPN
     (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study);
     PREP (Preparation); PROC (Process); USES (Uses)
        (prepn. and pharmacol. of pyridinium derivs. as cholinergics)
```

### IT 188778-78-1P

ΙT

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BPR (Biological process); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(prepn. and pharmacol. of pyridinium derivs. as cholinergics)

188778-80-5P 188778-81-6P 188778-82-7P 188778-91-8P 188778-92-9P

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BPR (Biological process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(prepn. and pharmacol. of pyridinium derivs. as cholinergics)
31034-86-3P, 3-Hydroxy-1-methylpyridinium bromide 68961-74-0P,
3-Hydroxy-1-decylpyridinium bromide 80635-16-1P, 3-Hydroxy-1dodecylpyridinium bromide 188778-88-3P, 3-Hydroxy-1-butylpyridinium
bromide 188778-89-4P, 3-Hydroxy-1-hexylpyridinium bromide
188778-90-7P, 3-Hydroxy-1-octylpyridinium bromide
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or
effector, except adverse); BPR (Biological process); MFM (Metabolic
formation); SPN (Synthetic preparation); BIOL (Biological study); FORM
(Formation, nonpreparative); PREP (Preparation); PROC (Process)
 (putative metabolite; prepn. and pharmacol. of pyridinium derivs. as
cholinergics)

IT 74-83-9, reactions 109-00-2, 3-Pyridinol 109-65-9, 1-Bromobutane
111-25-1, 1-Bromohexane 111-83-1, 1-Bromooctane 112-29-8,
1-Bromodecane 143-15-7, 1-Bromododecane 358-23-6, Triflic anhydride
572-09-8, 2,3,4,6-Tetra-O-acetyl-.alpha.-D-glucopyranosyl bromide
629-41-4, 1,8-Octanediol 3344-77-2, 12-Bromo-1-dodecanol 51581-32-9,
3-(Dimethylcarbamoyloxy)pyridine 53463-68-6, 10-Bromo-1-decanol
RL: RCT (Reactant)

(starting material; prepn. and pharmacol. of pyridinium derivs. as cholinergics)